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REMARKS

The application has been carefully reviewed in light of the final Office Action dated November 3, 2006. Claims 1-17 are pending, with claims 1, 10, 12 and 15 being in independent form.

Specification

This amendment requests the entry of an amendment that inserts into the specification the two articles that are cited at paragraph [0011] of the application as published under publication number 2002/0115930 on August 22, 2002. Applicant's representative signing this amendment hereby states that (i) the two articles were previously incorporated by reference (see paragraph [0011] in the published application), and (ii) the insertion thereof into the specification by this amendment contains no new matter.

This amendment presents the material for insertion as a photocopy of the articles. If the Office prefers to have the material presented as a retyped version of the articles, or in some other way, applicant respectfully requests instructions from the Office in this respect in the next Office Action.

Drawings

Applicant has added Figs. 4-8, which are copies of Figs. from the two articles that now are inserted in the specification. Figs. 4-8 are photocopies of photocopies of the articles, but applicant expects to promptly submit clearer replacement Figs. 4-8.

Claim Rejections – 35 USC § 112

Claims 1-17 were rejected under 35 U.S.C. § 112, first paragraph.

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It is believed that the insertion into the specification of the two articles that were previously incorporated by reference and the explanation below should overcome this rejection with respect to the claims submitted herewith.

Regarding claims 1-11, 13, 14, 16 and 17, it is believed that the inserted text, together with the original application text, adequately describes how the WMS signal of SNc tissue is used to produce resultant signals indicative of PD or PSP. As the claims now point out, WMS signals of brain tissue that includes SNc tissue are used in the process. For example, article (2) at pages 698-699, under the heading "Data Analysis," discusses obtaining WMS and WMS axial images, from which mesencephalic pendicular structures were extracted. A manual region-of-interest technique applied to these images extracted the cerebral peduncle. The ratio image ($WMC = S/GMS$) was computed and displayed in pseudocolor. A numerical value of the signal change in SNc was obtained by placing regions of interest (approximately 200 pixels each) on the lateral and medial segments of the SNc. The mean pixel value within each region of interest was then used to define the ratio of pixel values and four regions of interest were averaged to give R_{AV} , a parameter used to obtain the radiologic index RI. Figs. 3 and 4 in the article illustrate how this index RI differentiates controls from patients, and Fig. 4 illustrates staging based on the same index.

Regarding PSP and claims 10 and 11 (and 15-17), Fig. 3 in the patent application and the text at paragraph [0018] in the published application explain that the WMS and GMS images can be used to assess PSP using the ratio WMS/GMS. See, in particular, the caption of Fig. 3. The ratio can be obtained as discussed immediately above for index RI.

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Regarding claims 12-14 and differentiating between PD and PSP, note the caption of Fig. 3 in this application, stating that the gradient of signal is in the opposite directions and that this suggests the possibility of distinguishing between the two forms of parkinsonism.

Claim rejections – 35 USC § 103

The concurrently submitted declaration of the named inventor establishes that the two articles may not be relied on as prior art against the claims of record, because the relevant teaching in the articles was contributed by the named inventor. The articles were published less than a year before the filing date of the provisional application.

To the extent the Gosche patent (6,430,430) is understood, it does not appear to teach at least the last step of claim 1 (processing information from said GMS and WMS MRI signals to produce and present resultant signals indicative of PD). Further, it does not appear that Gosche proposes using WMS and GMS (white matter and gray matter suppressed) images to identify PD patients.

Similarly, Gosche does not appear to teach at least the last step of claim 10 (processing information from said GMS and WMS MRI signals to produce resultant signals indicative of PSP), or to use both WM and GM suppressed images for the purpose.

Referring to claim 12, it does not appear that Gosche proposes “to compute resultant signals differentiating between PD and PSP” as recited in the last step of the claim.

Referring to claim 15, it does not appear that Gosche teaches “computing and presenting resultant signals indicative of and identifying PSP” as recited in the last step of the claim.

It is submitted that the dependent claims distinguish from Gosche at least because of the features of their parent claims discussed above, although it is believed that they also recite additional features that further support patentability.

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It is further submitted that absent the teaching of the two articles in which the inventive contribution was that of the inventor named in this application, and which are not prior art against this application, the claimed subject matter would not have been obvious to a person of ordinary skill in the art in light of the Gosche patent.

General

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,



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